REMARKS

This is in response to the Office Action dated November 29, 2005. In view of the foregoing amendments and following representations, reconsideration is respectfully requested.

By the above amendment, claims 1-12 have been cancelled and replaced with new claims 13-30. Each of the new claims is directed to a plasma processing method which was elected for examination in the "RESPONSE TO RESTRICTION REQUIREMENT" of September 8, 2005. Thus, claims 13-30 are currently pending in the present application.

The abstract has been amended in order to make a number of minor editorial changes. A "marked-up" copy of the original abstract is enclosed to show the changes that have been incorporated into the substitute abstract. The enclosed copy is entitled "*Version with Markings to Show Changes Made*."

Next, on page 2 of the Office Action, claims 1-8 are rejected under 35 U.S.C. 112, second paragraph. As indicated above, claims 1-8 have been cancelled and replaced with new claims 13-20. Each of the new claims has been drafted to comply with the provisions of 35 U.S.C. 112, second paragraph and to more clearly define the novel features of the present invention. Note that proper antecedent basis is now provided for each of the recited elements.

Next, on page 3 of the Office Action, claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukuda (U.S. Patent Application Publication 2003/0170472). In the explanation of the rejection, the Examiner states in part that:

"*Fukuda teaches plasma processing a substrate with a plasma apparatus comprising an electrode opposed to a plurality of smaller electrodes.*"

Fukuda discloses, in paragraph [0005] that:

"*An object of the invention is to provide a method of uniformly forming a layer with high function over a large area with high productivity and with high production efficiency, a product comprising the layer, and an optical film comprising the layer, and to provide a dielectric coated electrode and a plasma discharge apparatus for carrying out the method and obtaining the product and the optical film.*"

In addition, in paragraph [0103] Fukuda discloses that:

"It is preferred in forming a uniform layer with high performance and without unevenness that the length in at least one direction of the electrode discharge surface is equal to or greater than that in the direction of the substrate surface on which the layer is to be formed, the direction being the same as the electrode discharge surface. When a substrate is transported relatively to the electrode to form a layer on the substrate, it *is preferred that in* the *direction perpendicular to the transport direction of the substrate, the* length *of the electrode discharge surface is equal to or greater than that of the substrate surface on which the layer is* to *be formed. Thus, according to the method in which the substrate is transported relatively to the electrode to form a layer on the substrate, it is possible to form a layer over a large area at high speed simply by moving the substrate or the electrode in one direction."* (emphasis added)

Thus, the Fukuda method employs an electrode that is longer than the width of the film substrate, and this represents a fundamental difference relative to the plasma processing method recited in new independent claims 13 and 22 of the present invention.

In the present invention, only an arbitrarily selected region *is* processed, *so* that at least one of the electrodes *is* **shorter than** the substrate in all of directions. This means that the plasma processing method of the present invention *is* performed under a condition where the electrode is **shorter than** the substrate in any of a transverse direction and a transport direction, which is perpendicular to the transverse direction. For example, the method is performed with an electrode that has a lower surface that confronts or faces an upper surface of the substrate and is **smaller than** the upper surface of the substrate. Alternatively, an upper surface of an electrode that confronts a lower surface of the substrate is made smaller that the lower surface of the substrate so that the substrate can be processed with a plasma in a desired arbitrary configuration without the necessity of using, for example, a mask.

Independent claim 13 requires that a part of an object is processed with an electrode that is smaller than a length in any direction of an opposing surface of the object to be processed. As explained above, the Fukuda method employs an electrode that is longer than the substrate in order to achieve a completely different result. Therefore, the present invention, as defined in claim 13, is

clearly allowable over the teachings of Fukuda. Note that claims 14-20 ultimately depend from claim 13 and are therefore allowable at least by virtue of their dependencies.

Similarly, independent claim 22 requires "supplying a high-frequency electric power to the first electrode while supplying gas from a gas supply unit to the object to be processed at a pressure in the vicinity of atmospheric pressure to generate plasma on a part of the object to be processed, wherein the area of the surface of the potentially controlled second electrode that is superposed on the object to be processed is smaller in any direction than an area of the opposing side of the object.

Accordingly, claim 22 is clearly allowable over the Fukuda patent, and claims 23-30 are allowable at least by virtue of their dependencies.

In view of the above, it is submitted that the present application is now clearly in condition for allowance. The Examiner therefore is requested to pass this case to issue.

In the event that the Examiner has any comments or suggestions of a nature necessary to place this case in condition for allowance, then the Examiner is requested to contact Applicant's undersigned attorney by telephone to promptly resolve any remaining matters.

Respectfully submitted,

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ABSTRACT OF THE DISCLOSURE

In a plasma processing method for supplying an electric power to a first electrode, making a first electrode have a ground potential, or making a first electrode have a floating potential while supplying gas to a plasma source arranged in a vicinity of an object to be processed at a pressure in a vicinity of an atmospheric ~~pressure, the~~ pressure. The method includes processing a part of the object to be processed with a plasma in a state where an area of a surface of a potentially controlled second electrode, arranged in a position opposite to the plasma source via the object to be processed, is made superposed on the object to be processed smaller than an area of a surface of the plasma source superposed on the object to be processed.

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